

transmitter to control the variable output of the transmitter using the low power output of the hybrid;

decision means having an output, coupled to the equalizer and further coupled to a received signal, for coupling the received signal and the output of the equalizer and for comparing at least one characteristic of the received signal to the output of the equalizer; and

detection means, coupled to the decision means, for providing a second control signal to the transmitter to control the variable output of the transmitter using the output of the decision means.

2. The crosstalk reduction device of claim 1, wherein the transmitter further comprises communication means for communicating with at least one other transmitter.

3. The crosstalk reduction device of claim 2, wherein an output level of the at least one other transmitter is controlled.

4. A crosstalk reduction device, comprising:

- a transmitter having a variable output for transmitting a signal;
- a hybrid, connected to the variable output of the transmitter, for diverting a portion of the variable output of the transmitter to a low power output;
- an equalizer, coupled to the low power output of the hybrid, having an output;
- decision means having an output, coupled to the equalizer and further coupled to a received signal, for coupling the received signal and the output of the equalizer and for comparing at least one characteristic of the received signal to the output of the equalizer;
- detection means, coupled to the decision means, having an output;
- multiplexer means for providing a first control signal to the transmitter to control the variable output of the transmitter using the signal to be transmitted; and
- a signal level detector, coupled to the received signal, for providing a second control signal to the transmitter to control the variable output of the transmitter using a control line from a remote transmitter.

5. The crosstalk reduction device of claim 4, wherein an output level of the at least one other transmitter is controlled.

6. A method for reducing crosstalk in a digital data system, comprising:

- setting a power level of a transmitter in a transceiver at a first site of the digital data system to a nominal value;
- receiving a signal at the transceiver of the first site, the signal being transmitted from a transmitter in a transceiver at a second site of the digital data system; and

- evaluating continuously at least one transmission characteristic of the signal received at the first site to continuously control the transmitter of the first site to reduce crosstalk, wherein the power level of the transmitter at the second site is increased when a noise margin at the first site is less than a first predetermined noise margin value and a line loss is greater than a first predetermined line loss value, and the power level of the transmitter at the first site is reduced when the noise margin at the first site is greater than a second predetermined noise margin value and the line loss is less than a second predetermined line loss value.

7. The method of claim 6, wherein the transmitter at the first site is located at a central office of the digital data system.

8. The method of claim 7, wherein the transmitter at the second site is located at a remote site of the digital data system.

9. A method for reducing crosstalk in a digital data system, comprising:

- providing a plurality of cables connected between a first site and a second site;
- setting a power level of a transmitter in a transceiver at the first site of a digital data system to a nominal value;
- receiving a signal at the transceiver of the first site, the signal being transmitted from a transmitter in a transceiver at the second site of the digital data system; and
- evaluating continuously at least one transmission characteristic of the signal received at the first site to continuously control the transmitter of the first site to reduce crosstalk the at least one transmission characteristic including a cable line loss value.

10. The method of claim 9, wherein the power level of the transmitter at the second site is increased when a noise margin at the first site is less than a first predetermined noise margin value and the cable line loss is greater than a first predetermined line loss value.

11. The method of claim 10, wherein the power level of the transmitter at the first site is reduced when the noise margin at the first site is greater than a second predetermined noise margin value and the cable line loss is less than a second predetermined line loss value.

12. The method of claim 9, wherein the transmitter at the first site is located at a central office of the digital data system.

13. The method of claim 12, wherein the transmitter at the second site is located at a remote site of the digital data system.

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